(19) World Intellectual Property **Organization**

International Bureau



(43) International Publication Date 27 January 2005 (27.01.2005)

PCT

(10) International Publication Number WO 2005/007603 A2

(51) International Patent Classification7: C07C 43/00

(21) International Application Number: PCT/IT2004/000375

6 July 2004 (06.07.2004)

(25) Filing Language:

English

(26) Publication Language:

(22) International Filing Date:

English

(30) Priority Data: 0316910.9

18 July 2003 (18.07.2003) GB

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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH,

[Continued on next page]

(54) Title: FLUOROCOMBRETASTATIN AND DERIVATIVES THEREOF

synthesis of difluorocombretastatin

(57) Abstract: The present invention is related to new derivatives of Combretastatin, of Formula (I) obtained by total synthesis. The strategy developed for each of the compounds is to i) replace a halogen (i.e. fluorine atom) to hydrogen on olefinic bound; ii) replace an aromatic ring in a natural product with an amino-aromatic ring. Said compounds recognize and bind the tubulin site: are useful for treating pathological states which arise from or are exacerbated by cell proliferation - as anticancer and/or antiangiogenic activity, in a mammal - to pharmaceutical compositions comprising these compounds.

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GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

 without international search report and to be republished upon receipt of that report

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